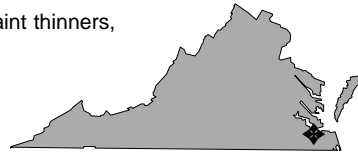


<b>Size:</b>	10,624 acres
<b>Mission:</b>	Provide ordnance technical support and related services; provide maintenance, modifications, production, loading, off-loading, and storage for the Atlantic Fleet
<b>HRS Score:</b>	50.00; placed on NPL in October 1992
<b>IAG Status:</b>	Federal Facility Agreement signed in September 1994
<b>Contaminants:</b>	Acids, asbestos, explosives, cadmium, lead, mercury, nickel, paint thinners, solvents, PCBs, varnishes, and waste oil
<b>Media Affected:</b>	Groundwater, surface water, sediment, and soil
<b>Funding to Date:</b>	\$24.7 million
<b>Estimated Cost to Completion (Completion Year):</b>	\$24.3 million (FY2015)
<b>Final Remedy in Place or Response Complete Date for All Sites:</b>	FY2009



Yorktown, Virginia

## Restoration Background

Since FY84, environmental studies at Yorktown Naval Weapons Station have identified 50 sites. No further action (NFA) has been recommended for 13 sites. The installation was placed on the National Priorities List (NPL) primarily because of contamination at six sites identified in FY92. These sites are hydrologically connected to the Chesapeake Bay. Contaminants include explosives and nitramine compounds and primarily affect groundwater, surface water, and sediment.

During FY93, the installation completed an initial site characterization for all four underground storage tank (UST) sites. A corrective action plan (CAP) also was completed. In FY95, corrective actions were completed for USTs 1 and 2.

Between FY84 and FY93, the installation completed an Initial Assessment Study for 19 sites, a confirmation study for 15 sites, and a Site Inspection (SI) for 1 site. During FY94, a Remedial Investigation and Feasibility Study (RI/FS) was completed for one site and Removal Actions were completed for three sites. The installation completed an SI for one solid waste management unit (SWMU). A comprehensive site management plan was completed in FY94 and is updated annually. The installation began partnering with the U.S. Army Corps of Engineers Waterways Experiment Station and initiated a Treatability Study (TS) of two technologies for treatment of explosives-contaminated soil under this program.

During FY95, the installation completed an SI for three SWMUs, completed an RI, and signed a Record of Decision (ROD) for NFA for one site and one SWMU. An innovative process demonstrated that composite carbon zinc battery waste was not hazardous. This approach saved more than \$1 million in disposal costs.

During FY96, the installation completed an SI for eight SWMUs. An RI/FS was completed and Remedial Design (RD) initiated for another site. RI/FSs were initiated at eight sites and five SWMUs. In addition, three fire training pits and associated contaminated soil, a UST and piping, and underwater ordnance items were removed from two SWMUs. In FY97, RI/FSs were initiated and completed for four sites. The installation completed field- and bench-scale TSs for one site and began Remedial Action (RA) for one site. SIs were completed at four SWMUs/Site Screening Areas (SSAs). Early actions took place at two SSAs. The installation implemented a large-scale pilot study to treat approximately 700 cubic yards of explosives-contaminated soil with the J.R. Simplot SABRE technology, an anaerobic bioslurry/biocell technology using potato waste as a co-metabolite to enhance degradation.

The installation formed a technical review committee in FY91 and converted it to a Restoration Advisory Board (RAB) in FY95. A community relations plan was completed the same year.

## FY98 Restoration Progress

Site investigations have been initiated at all identified sites. The Simplot SABRE technology was successfully used for a full-scale treatment of 1,200 cubic yards of explosives-contaminated soil. An RA was completed at one site, and long-term monitoring (LTM) was initiated at the site. Some RI/FSs and SIs scheduled for FY98 completion were moved to FY99 to focus on final ROD signatures. RAs were initiated for three sites. An additional innovative technology is being used to remediate soil contaminated with explosives and listed hazardous waste. This biotreatment technology is a solid phase land-treatment technique using organic methods. The cost-savings from this technology compared with the alternative (off-site incineration) are estimated to be between \$1.5 million and \$2 million.

A joint public-private partnership was initiated and will save the Navy approximately \$200,000 due to cost-sharing.

RAB meetings continued to foster a high level of trust within the community and a high level of installation commitment to the community. The installation continues successful use of partnering efforts with the regulatory agencies to expedite decision making and cleanup.

## Plan of Action

- Initiate RI/FSs at four sites in FY99
- Complete RI/FSs at 8 sites and SIs at 11 SSAs in FY99
- Sign four RODs for six sites in FY99
- Initiate RA at one site and complete RAs at three sites in FY99
- Initiate a Removal Action at one SSA in FY99
- Initiate LTM at three sites in FY99

## FY99 FUNDING BY PHASE AND RELATIVE RISK

